

AMENDMENTS TO THE CLAIMS

1. (Currently amended) Apparatus for managing a software component update on a computer system with a memory ~~in response to an update request~~, the apparatus comprising:

an activity adapted to implement a portion of a collaboration session, the activity generating an update request in response to an action by a user within the collaboration session;

a component manager that receives the request, and has a parser that extracts from the request URL information which identifies the location of a file containing the software component resources for satisfying the request;

a download manager that receives the URL information from the component manager and has a file retriever which asynchronously retrieves the file from the specified location, places the file in a staging area in the memory ~~and notifies the component manager~~; and

~~an install manager that is instructed by the component manager to~~ asynchronously installs ~~install~~ the file ~~in the staging area~~.

2. (Original) The apparatus of claim 1 wherein the file contains an OSD description of the software component resources.

3. (Original) The apparatus of claim 1 wherein the component manager comprises a security section that validates the file before installation.

4. (Original) The apparatus of claim 1 further comprising a manifest which contains a list of all software components installed on the computer system.

5. (Original) The apparatus of claim 4 wherein the component manager comprises a mechanism that responds to the request by checking the manifest to ascertain whether the requested software component is already installed on the computer system.

6. (Currently amended) The apparatus of claim 1 wherein the component manager ~~comprising~~ comprises a polling mechanism that periodically polls component locations to locate new component versions.

7. (Currently amended) The apparatus of claim 1 wherein the software component may be a ~~components include~~ system component ~~components~~ that is ~~are~~ required for operation of the apparatus or an ~~and~~ application component ~~components~~ that is ~~are~~ not required for operation of the apparatus and wherein the apparatus further comprises a system component manager that receives a request ~~requests~~ for the system component ~~components~~ and a system component installer that is started by the system component ~~manger~~ manager.

8. (Currently amended) The apparatus of claim ~~7~~ 1 wherein the activity generates the update request in response to receiving an invitation for a user to join the collaboration session, the invitation being generated in response to an action by a user within the collaboration session ~~system component installer comprises a system controller that shuts the system component manager down before installing in-use components.~~

9. (Currently amended) The apparatus of claim ~~8~~ 1 ~~wherein the system controller comprises a mechanism for restarting the system component manager after system components have been installed~~ 1 wherein the activity generates the update request in response to receiving an update delta for the collaboration session, the update delta being generated in response to an action by a user within the collaboration session.

10. (Original) The apparatus of claim 1 wherein the component manager comprises an activation factory for activating installed software components.

11. (Currently amended) A method for managing a software component update on a computer system with a memory ~~in response to an update request~~, the method comprising:

- (a) generating an update request in response to receiving information about a component being used in a collaboration session, the update request identifying the component;
 - (b) parsing the request to extract from the request URL information which identifies the location of a file containing the software component resources for satisfying the request;
 - (~~b~~c) using the URL information to asynchronously retrieve the file from the specified location;
 - (~~e~~) ~~places the file in a staging area in the memory; and~~
 - (d) asynchronously installing the component from the file in the staging area.
12. (Original) The method of claim 11 wherein the file contains an OSD description of the software component resources.
13. (Currently amended) The method of claim 11 ~~wherein step (e) comprises further~~ comprising:
- (~~e~~) validating the file before installation.
14. (Currently amended) The method of claim 11 further comprising:
- (~~e~~) ~~listing all software components installed on the computer system in a manifest~~ operating the computer system to implement a portion of the collaboration session using the component.
15. (Currently amended) The method of claim ~~14~~11 wherein step (~~b c~~) comprises checking ~~the a~~ manifest to ascertain whether the requested software component is already installed on the computer system before retrieving the file.
16. (Currently amended) The method of claim 11 further comprising:
- (~~f~~e) periodically polling component locations to locate new component versions.

17. (Currently amended) The method of claim 11 wherein the component may be a software ~~components include~~ system component ~~components~~ that is ~~are~~ required for operation of the apparatus or an ~~and~~ application component ~~components~~ that is ~~are~~ not required for operation of the apparatus and wherein the method further comprises:

(~~ge~~) when the component is a system component, installing ~~system components the~~ component with a separate system component manager, ~~which that~~ receives a request ~~requests for a system component,~~ ~~components~~ and a separate system component installer that is started by the system component ~~manger~~ manager.

18. (Currently amended) The method of claim 17 wherein step (~~ge~~) comprises shutting the system component manager down before installing in-use components.

19. (Currently amended) The method of claim 18 wherein step (~~ge~~) further comprises restarting the system component manager after the system component has ~~components have~~ been installed.

20. (Currently amended) The method of claim 11 further comprising:

(~~he~~) activating the installed software component ~~components~~ with an activation factory.

21. (Currently amended) A computer program product for managing a software component update on a computer system with a memory in response to an update request, the computer program product comprising a computer usable medium having computer readable program code thereon, including:

program ~~code~~code that ~~parses the request to extract~~s from the request URL information which identifies the location of a first file ~~containing the software component resources fro~~ for satisfying the request;

program code that uses the URL information to ~~asynchronously~~ retrieve the first file ~~from the specified location;~~

program code that ~~places the file in a staging area in the memory~~ extracts from the first file an indicia of a trusted supplier and obtains second location information of a second file, the second file containing a second component; and

program code that uses the second location information to retrieve the second file;

program code to extract from the second file the second component and an indicia of a supplier of the second component; and

program code that selectively asynchronously installs the ~~file in the staging area~~ second component when the indicia of the supplier is consistent with the indicia of a trusted supplier.

22. (Currently amended) The computer program product of claim 21 wherein the first file contains an OSD description of the software component, including dependent components resources.

23. (Original) The computer program product of claim 21 wherein the program code that ~~places the file in a staging area in the memory~~ comprises program code that ~~validates the file before validation~~ retrieves the second file is the same program code that retrieves the first file.

24. (Currently amended) The computer program product of claim 21 ~~further comprising program code for listing all software components installed on the computer system in a manifest~~ wherein the program code that extracts from the first file the indicia of a trusted supplier extracts a fingerprint of a trusted supplier.

25. (Currently amended) The computer program product of claim 24 21 wherein the program code that uses the ~~URL~~ information to ~~asynchronously~~ retrieve the file from the specified location comprises program code that checks ~~the~~ a manifest to ascertain whether the requested software component is already installed on the computer system before retrieving the file.

26. (Currently amended) The computer program product of claim 21 ~~further comprising~~ wherein the program code that ~~periodically polls component locations to locate new component~~

versions selectively installs the second component selectively prompts a user for authorization to install the second component when the indicia of the supplier is not consistent with the indicia of a trusted supplier.

27. (Currently amended) The computer program product of claim 21 wherein the software component may be a ~~components include~~ system component ~~components~~ that are ~~is~~ required for operation of the apparatus or an ~~and~~ application component ~~components~~ that is ~~are~~ not required for operation of the apparatus and wherein the computer program product further comprises program code that installs a system component ~~components~~ with a separate system component manager that receives a request ~~requests~~ for the system ~~components~~ component and a separate system component installer that is started by the system component ~~manger~~ manager.

28. (Original) The computer program product of claim 27 wherein the program code that installs system components with a separate system component manager and a separate system component installer comprises program code that shuts the system component manager down before installing in-use components.

29. (Currently amended) The computer program product of claim 28 wherein the program code that installs the system component ~~components~~ with a separate system component manager and a separate system component installer further comprises program code that restarts the system component manager after the system component ~~has~~ ~~components have~~ been installed.

30. (Original) The computer program product of claim 21 further comprising program code that activates installed software components with an activation factory.

31. (Currently amended) A computer data signal embodied in a carrier wave for managing a software component update on a computer system with a memory in response to an update request, the computer data signal comprising:

program code that ~~parses the request to extract~~ from the request URL information which identifies the location of a first file containing the software component resources for satisfying the request;

program code that uses the URL information to asynchronously retrieve the first file from the specified location;

program code that ~~places the file in a staging area in the memory~~ extracts from the first file dependency information identifying a second component upon which the first component is dependent; and

program code that selectively downloads a second file when the dependency information indicates the second component is in the second file; and

program code that ~~asynchronously installs the~~ first component and the second component file in the staging area.

32. (Currently amended) Apparatus for managing a software component update on a computer system with a memory ~~in response to an update request~~, the apparatus comprising:

means for implementing a collaboration session for a user, the means for implementing adapted to receive an indication of a component in use within the collaboration session and to selectively generate an update request for the component;

means responsive to the request, for parsing the request to extract from the request URL information which identifies the location of a file containing the software component resources for satisfying the request;

means for receiving the URL information ~~from the component manager~~ and asynchronously retrieving the file from the ~~specified~~ identified location, ~~placing the file in a staging area in the memory and notifying the parsing means; and~~

means cooperating with the parsing means for asynchronously installing the component from the file in the staging area.

33. (Original) The apparatus of claim 32 wherein the file contains an OSD description of the software component resources.

34. (Original) The apparatus of claim 32 wherein the parsing means comprises means for validating the file before installation.

35. (Original) The apparatus of claim 32 further comprising a manifest which contains a list of all software components installed on the computer system.

36. (Original) The apparatus of claim 35 wherein the parsing means comprises means responsive to the request for checking the manifest to ascertain whether the requested software component is already installed on the computer system.

37. (Original) The apparatus of claim 32 wherein the parsing means comprises means for periodically polling component locations to locate new component versions.

38. (Currently amended) The apparatus of claim 32 wherein the software component may be a ~~components include~~ system component ~~components~~ that is ~~are~~ required for operation of the apparatus or an ~~and~~ application component ~~components~~ that is ~~are~~ not required for operation of the apparatus and wherein the apparatus further comprises a system component manager that receives a request ~~requests~~ for the system component ~~components~~ and a system component installer that is started by the system component ~~manger~~ manager.

39. (Currently amended) The apparatus of claim 38 wherein the system component installer comprises means for shutting the system component manager down before installing an in-use component ~~components~~.

40. (Currently amended) The apparatus of claim 39 wherein the system controller comprises means for restarting the system component manager after system component has ~~components have~~ been installed.

41. (Original) The apparatus of claim 32 wherein the parsing means comprises means for activating installed software components.